

ABSTRACT OF THE DISCLOSURE

The present invention relates to a data processing apparatus and method for saturating data values. The data processing apparatus comprises a data processing unit for executing instructions, the data processing unit being responsive to a saturation instruction to apply a saturation operation to a data word Rm comprising a plurality of data values. The saturation operation yields a value given by: determining from data provided within a field of the saturation instruction a bit position to which saturation is to take place, and performing in parallel an independent saturation operation on each of the data values to saturate each of the data values to the determined bit position to form a result data word Rd comprising a plurality of saturated data values. This technique provides a particularly efficient and flexible technique for saturating multiple data values.

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